

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Previously Presented): A multilayer ceramic capacitor comprising:

a layered dielectric body composed by alternately dielectric layers; and internal electrode layers, the layered dielectric body having 50 layers or more; and

a pair of external electrodes connecting to the internal electrodes alternately at the both ends of the layered dielectric body,

wherein the dielectric layers comprise a barium titanate as a main component, sintering aids, a first sub-component and a second sub-component,

the sintering aids comprising silicon oxide as a main component and at least one of an M oxide (M is at least one element selected from a group consisting of Ba, Ca, Sr and Mg), lithium oxide and boron oxide,

the first sub-component comprising at least one of oxides selected from magnesium oxide, calcium oxide, barium oxide, strontium oxide and chromium oxide,

the second sub-component comprising one of R1 oxides (R1 is at least one element selected from a group of consisting of Sc, Er, Tm, Yb, Lu, Y, Dy, Ho, Tb, Gd and Eu),

wherein the internal electrode layer is made of a nickel or nickel alloy, and an average particle size of a raw material powder for the internal electrode layer is smaller than an average particle size of a raw material powder for the dielectric layers,

the average particle size of the raw material powder for the internal electrode layer being more than 0 and not more than 0.3  $\mu\text{m}$ ,

the average particle size of the raw material powder for the dielectric layers being more than 0 and not more than 0.45  $\mu\text{m}$ ,

wherein a thickness of each internal electrode layer is more than 0.2  $\mu\text{m}$  and not more than 2.5  $\mu\text{m}$ , and a thickness of each dielectric layer is more than 0.5  $\mu\text{m}$  and not more than 5  $\mu\text{m}$ ,

where in a tension stress in a direction of an electric field remains at a exposed face parallel to the direction of the electric field inside the layered dielectric body and the tension stress calculated by an X-ray diffraction measurement is a value not less than 50MPa.

Claims 2-3 (Canceled).

Claim 4 (Previously Presented): The multilayer ceramic capacitor according to claim 1, wherein said dielectric layers further contain at least one selected from  $\text{V}_2\text{O}_5$ ,  $\text{MoO}_3$ , and  $\text{WO}_3$  as a third sub-component.

Claim 5 (Currently Amended): The multilayer ceramic capacitor according to claim 4, wherein said ~~the~~ dielectric layers contain at least one selected from  $\text{MnO}$  and  $\text{Cr}_2\text{O}_3$  as a fourth sub component.

Claim 6 (Previously Presented): A multilayer ceramic capacitor comprising:  
a layered dielectric body composed by alternately dielectric layers; and internal electrode layers, the layered dielectric body having 50 layers or more; and  
a pair of external electrodes connecting to the internal electrodes alternately at the both ends of the layered dielectric body,  
wherein the dielectric layers comprise a barium titanate as a main component, sintering aids, a first sub-component and a second sub-component,

the sintering aids comprising silicon oxide as a main component and at least one of an M oxide (M is at least one element selected from a group consisting of Ba, Ca, Sr and Mg), lithium oxide and boron oxide,

the first sub-component comprising at least one of oxides selected from magnesium oxide, calcium oxide, barium oxide, strontium oxide and chromium oxide,

the second sub-component comprising one of R1 oxides (R1 is at least one element selected from a group consisting of Sc, Er, Tm, Yb, Lu, Y, Dy, Ho, Tb, Gd and Eu),

wherein the internal electrode layer is made of a nickel or nickel alloy, and an average particle size of a raw material powder for the internal electrode layer is smaller than an average particle size of a raw material powder for the dielectric layers,

the average particle size of the raw material powder for the internal electrode layer being more than 0 and not more than 0.3  $\mu\text{m}$ ,

the average particle size of the raw material powder for the dielectric layers being more than 0 and not more than 0.45  $\mu\text{m}$ ,

wherein a thickness of each internal electrode layer is more than 0.2  $\mu\text{m}$  and not more than 2.5  $\mu\text{m}$ , and a thickness of each dielectric layer is more than 0.5  $\mu\text{m}$  and not more than 5  $\mu\text{m}$ ,

wherein a compression stress in a direction connecting both the external electrodes remains at a exposed face parallel to the direction of the electric field inside the layered dielectric body and the compression stress calculated by an X-ray diffraction measurement is a value not less than 50MPa.

Claims 7-8 (Canceled).

Claim 9 (Previously Presented): The multilayer ceramic capacitor according to claim 6, wherein said dielectric layers further contain at least one selected from  $V_2O_5$ ,  $MoO_3$ , and  $WO_3$  as a third sub-component.

Claim 10 (Currently Amended): The multilayer ceramic capacitor according to claim 9, wherein said ~~the~~ dielectric layers contain at least one selected from  $MnO$  and  $Cr_2O_3$  as a fourth sub component.

Claim 11 (Previously Presented): A multilayer ceramic capacitor comprising:  
a layered dielectric body composed by alternately dielectric layers; and internal electrode layers, the layered dielectric body having 50 layers or more; and  
a pair of external electrodes connecting to the internal electrodes alternately at the both ends of the layered dielectric body,  
wherein the dielectric layers comprise a barium titanate as a main component, sintering aids, a first sub-component and a second sub-component,  
the sintering aids comprising silicon oxide as a main component and at least one of an M oxide (M is at least one element selected from a group consisting of Ba, Ca, Sr and Mg), lithium oxide and boron oxide,  
the first sub-component comprising at least one of oxides selected from magnesium oxide, calcium oxide, barium oxide, strontium oxide and chromium oxide,  
the second sub-component comprising one of R1 oxides (R1 is at least one element selected from a group of consisting of Sc, Er, Tm, Yb, Lu, Y, Dy, Ho, Tb, Gd and Eu),  
wherein the internal electrode layer is made of a nickel or nickel alloy, and an average particle size of a raw material powder for the internal electrode layer is smaller than an average particle size of a raw material powder for the dielectric layers,

the average particle size of the raw material powder for the internal electrode layer being more than 0 and not more than 0.3  $\mu\text{m}$ ,

the average particle size of the raw material powder for the dielectric layers being more than 0 and not more than 0.45  $\mu\text{m}$ ,

wherein a thickness of each internal electrode layer is more than 0.2  $\mu\text{m}$  and not more than 2.5  $\mu\text{m}$ , and a thickness of each dielectric layer is more than 0.5  $\mu\text{m}$  and not more than 5  $\mu\text{m}$ ,

wherein a compression stress in a direction connecting both the external electrodes remains at an outer surface perpendicular to electric field direction of the layered dielectric body and the compression stress calculated by an X-ray diffraction measurement is a value not less than 100 MPa.

Claims 12-13 (Canceled).

Claim 14 (Previously Presented): The multilayer ceramic capacitor according to claim 11, wherein said dielectric layers further contain at least one selected from  $\text{V}_2\text{O}_5$ ,  $\text{MoO}_3$ , and  $\text{WO}_3$  as a third sub-component.

Claim 15 (Currently Amended): The multilayer ceramic capacitor according to claim 14, wherein said ~~the~~ dielectric layers contain at least one selected from  $\text{MnO}$  and  $\text{Cr}_2\text{O}_3$  as a fourth sub component.

Claim 16 (Currently Amended): A multilayer ceramic capacitor comprising:  
a layered dielectric body composed by alternately dielectric layers; and internal electrode layers, the layered dielectric body having 50 layers or more; and

a pair of external electrodes connecting to the internal electrodes alternately at the both ends of the layered dielectric body,

wherein the dielectric layers comprise a barium titanate as a main component, sintering aids, a first sub-component and a second sub-component,

the sintering aids comprising silicon oxide as a main component and at least one of an M oxide (M is at least one element selected from a group consisting of Ba, Ca, Sr and Mg), lithium oxide and boron oxide,

the first sub-component comprising at least one of oxides selected from magnesium oxide, calcium oxide, barium oxide, strontium oxide and chromium oxide,

the second sub-component comprising one of R1 oxides (R1 is at least one element selected from a group of consisting of Sc, Er, Tm, Yb, Lu, Y, Dy, Ho, Tb, Gd and Eu),

wherein the internal electrode layer is made of a nickel or nickel alloy, and an average particle size of a raw material powder for the internal electrode layer is smaller than an average particle size of a raw material powder for the dielectric layers,

the average particle size of the raw material powder for the internal electrode layer being more than 0 and not more than 0.3  $\mu\text{m}$ ,

the average particle size of the raw material powder for the dielectric layers being more than 0 and not more than 0.45  $\mu\text{m}$ ,

wherein a thickness of each internal electrode layer is more than 0.2  $\mu\text{m}$  and not more than 2.5  $\mu\text{m}$ , and a thickness of each dielectric layer is more than 0.5  $\mu\text{m}$  and not more than 5  $\mu\text{m}$ ,

wherein a stress remains at the outer surface of layered dielectric body in a direction of perpendicular to the electric field direction, and the stress in a direction connecting both external electrodes is satisfied ~~next~~ by the equation,  $LS = -\ln(n) \times B$  and  $10 \leq B \leq 300$ , in which n: number of dielectric layers; B: constant of proportion; LS: a value of the stress in a

direction connecting to the both external electrodes at an outer surface of the layered dielectric body perpendicular to the direction of electric field therein calculated by an X-ray diffraction measurement; and Ln: natural logarithm.

Claims 17-18 (Canceled).

Claim 19 (Previously Presented): The multilayer ceramic capacitor according to claim 16, wherein said dielectric layers further contain at least one selected from  $V_2O_5$ ,  $MoO_3$ , and  $WO_3$  as a third sub-component.

Claim 20 (Currently Amended): The multilayer ceramic capacitor according to claim 19, wherein said ~~the~~ dielectric layers contain at least one selected from MnO and  $Cr_2O_3$  as a fourth sub component.

Claim 21 (Canceled).

Claim 22 (Previously Presented): The multilayer ceramic capacitor according to claim 1, wherein the layered dielectric body has 100 layers or more, the average particle size of the raw material powder for the internal electrode layer being more than 0 and not more than 0.2  $\mu m$ , and the average particle size of the raw material powder for the dielectric layers being more than 0 and not more than 0.35  $\mu m$ .

Claim 23 (Previously Presented): The multilayer ceramic capacitor according to claim 6, wherein the layered dielectric body has 100 layers or more, the average particle size of the raw material powder for the internal electrode layer being more than 0 and not more

than 0.2  $\mu\text{m}$ , and the average particle size of the raw material powder for the dielectric layers being more than 0 and not more than 0.35  $\mu\text{m}$ .

Claim 24 (Previously Presented): The multilayer ceramic capacitor according to claim 11, wherein the layered dielectric body has 100 layers or more, the average particle size of the raw material powder for the internal electrode layer being more than 0 and not more than 0.2  $\mu\text{m}$ , and the average particle size of the raw material powder for the dielectric layers being more than 0 and not more than 0.35  $\mu\text{m}$ .

Claim 25 (Previously Presented): The multilayer ceramic capacitor according to claim 16, wherein the layered dielectric body has 100 layers or more, the average particle size of the raw material powder for the internal electrode layer being more than 0 and not more than 0.2  $\mu\text{m}$ , and the average particle size of the raw material powder for the dielectric layers being more than 0 and not more than 0.35  $\mu\text{m}$ .

Claim 26 (Previously Presented): The multilayer ceramic capacitor according to claim 1, wherein

the first and second sub-components comprise one or more oxide selected from magnesium oxide, yttrium oxide, barium oxide, and calcium oxide,

the dielectric layers comprise 2 to 12 mol of silicon oxide that is expressed by a molecular formula,  $\text{SiO}_2$ , 0.1 to 3 mol of magnesium oxide that is expressed by a molecular formula,  $\text{MgO}$ , exceeding 0 mol to 5 mol or less yttrium oxide that is expressed by a molecular formula,  $\text{Y}_2\text{O}_3$ , and total 2 to 12 mol of barium oxide and calcium oxide that are expressed by a molecular formula,  $\text{BaO}$  and  $\text{CaO}$ , respectively, with respect to 100 mol of barium titanate that is expressed by a molecular formula,  $\text{BaTiO}_3$ .



Claim 27 (Previously Presented): The multilayer ceramic capacitor according to claim 6, wherein

the first and second sub-components comprise one or more oxide selected from magnesium oxide, yttrium oxide, barium oxide, and calcium oxide,

the dielectric layers comprise 2 to 12 mol of silicon oxide that is expressed by a molecular formula,  $\text{SiO}_2$ , 0.1 to 3 mol of magnesium oxide that is expressed by a molecular formula,  $\text{MgO}$ , exceeding 0 mol to 5 mol or less yttrium oxide that is expressed by a molecular formula,  $\text{Y}_2\text{O}_3$ , and total 2 to 12 mol of barium oxide and calcium oxide that are expressed by a molecular formula,  $\text{BaO}$  and  $\text{CaO}$ , respectively, with respect to 100 mol of barium titanate that is expressed by a molecular formula,  $\text{BaTiO}_3$ .

Claim 28 (Previously Presented): The multilayer ceramic capacitor according to claim 11, wherein

the first and second sub-components comprise one or more oxide selected from magnesium oxide, yttrium oxide, barium oxide, and calcium oxide,

the dielectric layers comprise 2 to 12 mol of silicon oxide that is expressed by a molecular formula,  $\text{SiO}_2$ , 0.1 to 3 mol of magnesium oxide that is expressed by a molecular formula,  $\text{MgO}$ , exceeding 0 mol to 5 mol or less yttrium oxide that is expressed by a molecular formula,  $\text{Y}_2\text{O}_3$ , and total 2 to 12 mol of barium oxide and calcium oxide that are expressed by a molecular formula,  $\text{BaO}$  and  $\text{CaO}$ , respectively, with respect to 100 mol of barium titanate that is expressed by a molecular formula,  $\text{BaTiO}_3$ .

Claim 29 (Previously Presented): The multilayer ceramic capacitor according to claim 16, wherein

the first and second sub-components comprise one or more oxide selected from magnesium oxide, yttrium oxide, barium oxide, and calcium oxide,

the dielectric layers comprise 2 to 12 mol of silicon oxide that is expressed by a molecular formula,  $\text{SiO}_2$ , 0.1 to 3 mol of magnesium oxide that is expressed by a molecular formula,  $\text{MgO}$ , exceeding 0 mol to 5 mol or less yttrium oxide that is expressed by a molecular formula,  $\text{Y}_2\text{O}_3$ , and total 2 to 12 mol of barium oxide and calcium oxide that are expressed by a molecular formula,  $\text{BaO}$  and  $\text{CaO}$ , respectively, with respect to 100 mol of barium titanate that is expressed by a molecular formula,  $\text{BaTiO}_3$ .